

ABSTRACT

Provided herein are a method and an apparatus for examining foreign matters in through holes, which can quickly make determinations with low costs and high accuracy. An apparatus is equipped with a light source 12 provided on one side and a line sensor camera 14 (or an area sensor) provided on the other side with a work piece 10 having a plurality of through holes being placed between them. A parallel displacement system (XY table 16) is provided to translate the work piece and the line sensor camera relative to each other to allow the line sensor camera to detect light passing through the plurality of through holes in one lot, and an image processing device 24 is provided to receive detected signals provided by the line sensor camera to obtain a plurality of binary image data corresponding to the plurality of through holes in the work piece. The image processing device is equipped with a determination device that makes determination as to whether foreign matters are present or absent in the through holes based on deviations among receiving light regions corresponding to the respective through holes.